Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHARLES S. PALM
and
RAYMOND McLAINE

Appeal No. 1999-1635
Application No. 08/892,443

ON BRIEF

Before HAIRSTON, FLEMING, and DIXON, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 3 through 5, 17, 23 and 29 through 37.

The disclosed invention relates to a method and apparatus for either viewing, capturing or reproducing three-dimensional color images without color matrixing.

Claims 29, 30 and 34 are illustrative of the claimed invention, and they read as follows:

29. Apparatus for viewing three dimensional color images comprising:

an image shifter shifting one color plane of one image view with respect to less than all color planes of another image view, and

a display connected to said one color plane and to the less than all color planes without color matrixing to form a three dimensional color image.

30. Apparatus for capturing a three dimensional image, comprising:

a left and a right color camera capturing left and right color images of a scene; respectively;

an image shifter shifting the position of one color plane of one of the left or right color images with respect to less than all color planes of the other of said left or right color images; and

a storage medium storing said one color plane and said less than all color planes as a three dimensional color image without color matrixing.

34. A method for reproducing a three dimensional image from a first digital color image and a second digital color image stored on a storage medium, comprising the steps of:

a. retrieving each of said first digital color image and said second digital color images from said storage medium and presenting them as respective sets of red, green and blue color planes;

b. shifting one color plane of a first set with respect to less than all color planes of a second set; and

c. combining the color plane of said first set with color planes of said second set without color matrixing to produce a three dimensional color image.

The references relied on by the examiner are:

Butterfield et al. (Butterfield)	4,734,756	Mar. 29, 1988
Choquet	5,140,415	Aug. 18, 1992

Claims 17, 23 and 29 through 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Butterfield.

Claims 3 through 5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Butterfield in view of Choquet.

Reference is made to the final rejection (paper number 21), the brief (paper number 23) for appellants' position in response to the rejections, and the answer (paper number 24) for the examiner's response to appellants' position.

OPINION

We have carefully considered the entire record before us, and we will reverse the obviousness rejections

of claims 3 through 5, 17, 23 and 29 through 37.

Appellants argue inter alia (brief, pages 16 and 18) that Butterfield's method and apparatus differs from the claimed method and apparatus in that NTSC encoding with color matrixing is used in the reference. All of the claims on appeal expressly state that all processing is performed without color matrixing.[1]

In view of the holding in In re Karlson, 311 F.2d 581, 584, 136 USPQ 184, 186 (CCPA 1963) that "omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before," the examiner is of the opinion (paper number 21, page 4) that it would have been obvious for one of ordinary skill in the art to eliminate Butterfield's NTSC encoding without interfering with the color image synthesis of the apparatus. When Butterfield is considered as a whole, it is quite clear that the NTSC encoding that the examiner would cavalierly discard from

[1]Appellants' originally filed disclosure and claims never expressly state that the colors are combined "without color matrixing." If there is a written description problem with this phrase in the claims, then we leave it to the examiner to resolve with the appellants.

the teachings of this reference is essential to the proper operation of the system. The examiner's contentions (paper number 21, page 6) to the contrary notwithstanding, Butterfield never established "the independence of the NTSC encoding step in the stereoscopic encoder." Since none of the embodiments disclosed in Butterfield teaches or suggests the elimination of the NTSC encoding step, we agree with the appellants' argument (brief, page 14) that "[e]ach of the embodiments illustrated in Butterfield for carrying out his invention utilizes NTSC encoding." "There is no need to modify it other than to meet Appellants' claims" (brief, page 9).

Based upon the foregoing, the obviousness rejection of claims 17, 23 and 29 through 37 is reversed.

Turning to claims 3 through 5, we find that the imaging system teachings of Choquet do not cure the noted shortcoming in the teachings of Butterfield. Thus, the obviousness rejection of claims 3 through 5 is reversed.

DECISION

The decision of the examiner rejecting claims 3 through 5, 17, 23 and 29 through 37 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOSEPH L. DIXON Administrative Patent Judge	)	

KWH:hh

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